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**Böhm et al.**

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(54) **METHOD AND APPARATUS FOR SORTING PARTICLES**

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(57) **ABSTRACT**

A method and apparatus for sorting particles moving through a closed channel system of capillary size comprises a bubble valve for selectively generating a pressure pulse to separate a particle having a predetermined characteristic from a stream of particles. The particle sorting system may further include a buffer for absorbing the pressure pulse. The particle sorting system may include a plurality of closely coupled sorting modules which are combined to further increase the sorting rate. The particle sorting system may comprise a multi-stage sorting device for serially sorting streams of particles, in order to decrease the error rate.

**21 Claims, 5 Drawing Sheets**

